

**BEFORE**  
**THE SOUTH CAROLINA PUBLIC SERVICE COMMISSION**  
**TESTIMONY OF CHARLES R. PARMELEE**  
**DOCKET NO. 2013-378-E**

1     Q.   PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.

2     A.   My name is Charles R. Parmelee and I am an independent utility consultant and  
3         Principal of Parmelee & Associates, 1025 Princeton Walk, Marietta, Georgia  
4         30068.

5     Q.   WHAT IS YOUR EDUCATIONAL BACKGROUND?

6     A.   I graduated from Georgia State University in 1970 with a Bachelor of Arts  
7         degree in Mathematics.

8     Q.   DESCRIBE YOUR BUSINESS EXPERIENCE RELATED TO UTILITY RATE  
9         DESIGN AND COST OF SERVICE.

10    A.   I was employed by Florida Power & Light Company in Miami, Florida, in 1972  
11         as a computer programmer working on engineering, accounting, and utility rate  
12         applications. In 1975 I was promoted to the position of Load Research Analyst  
13         in the Rate Department. I performed load research analysis, and assisted in  
14         the areas of cost of service analysis and rate design. In 1978, I accepted a  
15         position as a Rate Design Specialist with Georgia Power Company in Atlanta,  
16         Georgia. I worked there until 1979 in the areas of rate design and revenue  
17         forecasting. I was employed from 1980 to 1991 by Ebasco Services  
18         Incorporated as a consultant to a number of domestic and foreign utility  
19         companies and regulatory agencies. My assignments included cost of service,  
20         rate design, load research, electric generating plant appraisals, and load  
21         management evaluation. Since February, 1991, I have worked as an

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1 independent consultant, primarily doing rate design and cost of service work.

2 Q. HAVE YOU TESTIFIED AS AN EXPERT WITNESS REGARDING UTILITY  
3 RATE MATTERS BEFORE REGULATORY COMMISSIONS?

4 A. Yes. I have testified on utility rate matters eight times before the South Carolina  
5 Public Service Commission, and also before the Florida Public Service  
6 Commission, the Arkansas Public Service Commission, the Georgia Public  
7 Service Commission, the Nebraska Public Power District, and the Bermuda  
8 Price Control Commission.

9 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

10 A. I am testifying on behalf of my client, Lockhart Power Company, regarding the  
11 preparation of the cost of service studies and rate schedules set forth in the  
12 Exhibits of this filing.

13 Q. PLEASE DESCRIBE THE COST OF SERVICE STUDIES YOU PREPARED  
14 FOR LOCKHART POWER COMPANY.

15 A. I prepared four cost of service studies: Historical, Pro Forma, Equal Rates of  
16 Return, and Proposed. Included in Exhibit B are the full allocation details for the  
17 Historical and Pro Forma studies and the summary pages for the Equal Rates  
18 of Return and Proposed studies.

19 The Historical Cost of Service Study reflects the costs according to  
20 Lockhart's books as adjusted for the test year ended December 31, 2012. The  
21 book adjustments made for the Historical study are shown in Exhibit A3-7 and

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1 include the removal of expenses, plant investment, and revenues associated  
2 with the Columbia Hydroelectric plant and other non-jurisdictional sales and  
3 associated expenses. A \$394,292 adjustment was made to Industrial revenue  
4 and purchased power expense to correctly reflect the flow through of Demand  
5 Side Management credits from Duke Energy to Lockhart Industrial customers,  
6 as explained in Exhibit A3-7d. The Historical Cost of Service Study rate of  
7 return for the retail classes was 8.39%.

8 The Pro Forma Study differs from the Historical Study as a result of the  
9 pro forma adjustments listed and summarized in Exhibit A3. The largest  
10 expense adjustment is an increase in Production Expense for the additional  
11 costs to operate and maintain the Columbia Hydroelectric plant and two  
12 additional hydroelectric generating plants as described in Exhibits A3-11, A3-12,  
13 and A3-22. These plants also require significant pro forma adjustments to rate  
14 base. The output from these plants will be sold off-system and revenues from  
15 those sales will be credited to requirements customers through the power  
16 adjustment clauses. This credit is included in the \$2,351,085 pro forma  
17 reduction to retail rate revenue. Other adjustments reflect known and  
18 measurable changes in wages, depreciation, taxes, revenues, and regulatory  
19 expense. The Pro Forma Study yielded an overall rate of return of 2.76%, and  
20 a rate of return of 4.07% for the retail classes as shown in Exhibit B2, page 27,  
21 line 30.

22 The Equal Rates of Return study includes the Pro Forma adjustments  
23 and sets class revenues at the levels required to yield a rate of return of 12.50%  
24 for each rate class.

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1           The Proposed Study includes the Pro Forma adjustments and the  
2           proposed revenues for each retail rate class. The overall retail rate of return is  
3           12.50% for the Proposed Study, but all of the individual retail rate classes vary  
4           from the average as shown in Exhibit B4 page 2 line 30. The Residential class  
5           yields a below average 10.04% rate of return, as do the Commercial class at  
6           10.31%, the Street Lighting class at 11.13%, and the Outdoor Lighting Class at  
7           10.72%. The Industrial class yields an above average rate of return of 17.73%.  
8           The revenues shown for each retail rate class in the Proposed Study are the  
9           revenues that would be produced by the rates proposed in this filing, based on  
10          customer usage in the test year ended December 31, 2012.

11        Q.    WHAT METHODS DID YOU USE TO DEVELOP THESE COST OF SERVICE  
12               STUDIES?

13        A.    I used the traditional electric utility cost of service methods of functionalization,  
14               classification, and allocation of costs, as described in the Electric Utility Cost  
15               Allocation Manual published by the National Association of Regulatory Utility  
16               Commissioners.

17        Q.    DO THESE METHODS DIFFER SUBSTANTIALY FROM THOSE USED IN  
18               PREVIOUS COST OF SERVICE STUDIES DONE FOR LOCKHART?

19        A.    No, the methodology and format of the cost of service studies filed in this  
20               proceeding are almost identical to those of the previous Lockhart rate filing,  
21               Docket No. 2010-181-E.

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1 Q. HOW DID YOU DETERMINE THE REVENUE REQUIREMENTS FOR EACH  
2 RATE CLASS?

3 A. I first determined the revenues required for each rate class to yield a rate of  
4 return of 12.50%. Those revenues are compared in Exhibit A4 to the revenues  
5 under the present rates. To reach an equal rate of return for each rate class  
6 would require reducing Industrial class rate revenues by 10.70%, increasing  
7 Residential rate revenues by 19.70%, and increasing Commercial revenues by  
8 17.45%. Lighting class revenues would increase by about 14% to 17%.  
9 Although Lockhart Power Company supports the goal of basing rates on cost of  
10 service, I recommended that this goal be deferred in order to reduce the impact  
11 of the increase on Residential, Commercial, and lighting customers. Therefore,  
12 I propose to maintain the Industrial revenues at the present level, and allocate  
13 the indicated Industrial revenue decrease to the Residential, Commercial, and  
14 Lighting classes proportional to the Equal Rates of Return increase amounts.  
15 This approach reduces the Residential rate increase from 19.70% to 12.90%,  
16 the Commercial increase from 17.45% to 11.43%, and the lighting classes  
17 down to about 9% to 11%, as shown in Exhibit A4 lines 14 and 26.

18 Q. IS THIS METHOD SIMILAR TO THE METHOD OF DETERMINING CLASS  
19 RATES OF RETURN IN OTHER LOCKHART RATE FILINGS?

20 A. This method is the same as the method used in the last filing, Docket 2010-181-  
21 E, and also similar to the methods used in the six prior filings. These general  
22 methods of determining rates of return and class revenue requirements were  
23 proposed by Lockhart, supported by the Commission Staff, and approved by

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1           this Commission in Docket 89-178-E, Docket 90-480-E, Docket 91-671-E,  
2           Docket 2000-0091-E, Docket 2002-122-E, Docket 2007-33-E, and Docket  
3           2010-181-E.

4       Q.    IN YOUR OPINION, IS THE PROPOSED METHOD OF DETERMINING  
5           CLASS REVENUE REQUIREMENTS, FAIR, REASONABLE, AND  
6           CONSISTENT WITH GENERALLY ACCEPTED REGULATORY PRACTICE?

7       A.    Yes, it is. From my experience, it is more common to find utilities moving rates  
8           toward equal rates of return than it is to find utilities that have achieved that  
9           goal.

10      Q.    WHAT IS THE AVERAGE RATE REVENUE PERCENTAGE INCREASE TO  
11           EACH RATE CLASS?

12      A.    Those figures are shown in Exhibit A4, line 26. The percentage revenue  
13           increase to each class is: Industrial, -1.37%; Residential, 12.90%; Commercial,  
14           11.43%; Street Lighting, 8.89%; and Outdoor Lighting, 11.32%. The total  
15           increase in retail revenues is 6.77%.

16      Q.    YOU STATED THAT YOU PROPOSE TO MAINTAIN INDUSTRIAL  
17           REVENUES AT PRESENT LEVELS, BUT EXHIBIT A4, LINE 26 SHOWS A  
18           1.37 PERCENT DECREASE IN INDUSTRIAL REVENUES UNDER THE  
19           PROPOSED RATES. CAN YOU EXPLAIN THIS APPARENT  
20           CONTRADICTION?

21      A.    Yes. Line 26 of Exhibit A4 shows the proposed revenues relative to the

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1 Historical study revenues. But the Historical study Industrial revenues include  
2 \$100,809 of power factor billing that will not occur in the future and was  
3 removed as a pro forma adjustment as explained in Exhibit A3-20. Therefore,  
4 relative to the Historical unadjusted revenues, Industrial revenues must be  
5 \$100,809 lower in order to maintain the present revenue level.

6 Q. HOW DID YOU DESIGN RATES TO RECOVER THE PROPOSED CLASS  
7 REVENUES?

8 A. Residential Service, Schedule R, and Residential Service All Electric, Schedule  
9 RA, retain the same rate format previously approved by this Commission. The  
10 customer charge was increased from \$7.00 to \$8.75 per month and the energy  
11 charges in both Schedules were increased proportionally to achieve the  
12 required revenue levels. The proposed residential rates represent an average  
13 increase of 12.9% over the present rates and most residential customers will  
14 receive increases in the range of 12.7% to 13.7%.

15 General Service Commercial, Schedule C3, and General Service All  
16 Electric, Schedule GA retain the previously approved rate structure. That  
17 structure consists of a customer charge, a demand charge for kilowatts of billing  
18 demand in excess of 30 kW, and three blocks of energy charges. The energy  
19 charges are separated into categories above and below 200 hours of use of the  
20 billing demand in order to reflect the relationship of customer load factor and  
21 customer peak diversity. The first 200 hours of use is further divided into two  
22 blocks at the 3,000 kilowatt-hour level. The 3,000 kilowatt-hour block is  
23 necessary in order to recover demand related costs associated with the first 30

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1 kilowatts of demand, which is not billed, and to reflect the higher unit distribution  
2 related costs associated with customers using relatively few kilowatt-hours each  
3 month.

4 To determine the correct rate levels, the costs allocated in the cost of  
5 service study to the commercial class were separated into four categories: 1)  
6 customer costs; 2) customer non-coincident peak related distribution costs; 3)  
7 class non-coincident peak related production, transmission, distribution, and  
8 purchased power costs; and 4) energy related costs. The customer charge  
9 was increased to \$9.00 per month, and the remainder of the customer related  
10 costs were allocated to the first energy block, as were demand costs associated  
11 with the first 30 kilowatts of demand.

12 The customer non-coincident peak related costs were directly allocated  
13 to the demand charge. The class non-coincident peak related costs were  
14 allocated to the demand charge and the energy blocks in a manner which  
15 reflects the relationship between customer load factor and peak diversity. This  
16 method allocates less demand related costs to the kilowatt-hours in excess of  
17 200 hours of use of the demand, since demand responsibility increases at a  
18 comparatively low rate as a customer's load factor increases beyond 200 hours  
19 of use. The proposed General Service rate levels are a compromise between  
20 these costs, Lockhart's average and incremental purchased power cost, and an  
21 allowance for adverse customer bill impacts.

22 The demand charge is increased relative to the energy blocks because  
23 demand related costs have increased relative to energy related costs. The  
24 primary reason for this shift in costs is due to the fact that the wholesale power



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1 rate schedule under which Lockhart purchases power from Duke Energy has  
2 higher demand charges relative to energy charges and this shift is reflected in  
3 Lockhart's purchased power costs.

4 As a result of the higher demand related costs, low load factor  
5 customers may have higher bill increases and some high load factor customers  
6 may have bill decreases, but this difference is justified by the cost of service  
7 studies. The proposed General Service rates, Schedule C3 and GA, represent  
8 an average increase of 11.43% over the presently effective rates. However,  
9 individual customers may have bill increases or decreases depending on usage  
10 characteristics. For most individual customers, increases will be less than 18%  
11 and some customers may have decreases as much as 2%.

12 Schedule I, Industrial Service also retains the rate structure previously  
13 approved by this Commission. Although the Industrial class revenues were set  
14 at the present rate level, the rates required adjustment in order to reflect the  
15 changes in the power cost adjustment, and also to reflect the cost of service.  
16 The rate levels for the proposed Schedule I were determined in generally the  
17 same manner as those for the General Service Rates. The proposed Schedule  
18 I produces the same total revenues as the present rate, but individual  
19 customers may have bill increases or decreases depending on usage  
20 characteristics. Some low load factor customers will have increases as much  
21 as 16.9% and some large high load factor customers will have decreases of as  
22 much as 1.9%. These differentials are justified by the results of the cost of  
23 service studies.

24 Although the base rate charges are increased, the impact on total

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1 revenues is zero for this class. The reason for this can be seen in Exhibit A4  
2 lines 23 through 26. Base rate revenues for the Industrial class increase, but the  
3 total rate revenue decreases by the amount of the \$100,809 pro forma  
4 adjustment for the power factor billing. This is because all of the Power  
5 Adjustment Clause revenues from the present rates have been rolled into the  
6 base rates. For the Industrial class the present rate PAC revenues were  
7 \$1,196,165 as shown on Exhibit 4 line 2 as compared to zero for the proposed  
8 rates on line 18. Therefore the revenue from the proposed Industrial base rate  
9 will collect the same revenue as the present base rate plus PAC revenue in the  
10 Historical Case.

11 Schedule OL, Outdoor Lighting and Schedule SL, Street Lighting were  
12 adjusted proportionally to produce the required revenue. The proposed  
13 Schedule OL and SL represent increases of 8.89% and 11.32% respectively  
14 over the presently effective schedules.

15 Schedule EF, Extra Facilities was not changed.

16 Q. EXPLAIN THE CHANGES YOU MADE TO THE POWER ADJUSTMENT  
17 CLAUSE, SCHEDULE O?

18 A. The proposed Power Adjustment Clause Schedule O defines the monthly  
19 adjustment as the sum of the purchased power cost and fuel cost less off-  
20 system sales revenue credits divided by the total kilowatt-hours billed less the  
21 base amount. This formula has not changed, but I have recomputed the base  
22 amount, which represents the amount of power cost which is included in each  
23 rate schedule. This figure is determined by dividing the total power cost less

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1 revenue credits for the pro forma adjusted test year by the total pro forma  
2 kilowatt-hour sales. This computation yields a base amount of 3.8571 cents per  
3 kilowatt-hour. The computation is shown in Exhibit A6. The proposed base  
4 amount is very close to the present base amount of 3.8622 cents per kilowatt-  
5 hour, but that results from two major offsetting cost elements, a \$5.4 million  
6 increase in purchased power costs largely offset by a \$4.1 million increase in  
7 revenue credits from off-system sales. Purchased power cost per kilowatt-hour  
8 increased 30% since the last case and the base amount would have also  
9 increased by a similar factor if not for the increase in the revenue credits.

10 Q. WHAT IS THE PURPOSE OF THE POWER ADJUSTMENT CLAUSE?

11 A. This clause is necessary to fairly protect the interests of both Lockhart and its  
12 customers. The clause automatically adjusts Lockhart's revenues to reflect  
13 changes in power costs and off-system sales revenues. Without this  
14 mechanism, Lockhart's income and return on investment could fluctuate  
15 wildly, up or down, with changes in power costs and revenues.

16 Q. WHAT COST INCREASE HAS HAD THE GREATEST EFFECT ON  
17 LOCKHART POWER CUSTOMERS IN RECENT YEARS?

18 A. In the last three years, including the cost increases incorporated in this filing,  
19 increasing purchased power costs have had the greatest impact, by far.

20 Q. CAN YOU QUANTIFY THE PURCHASED POWER COST INCREASE

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1           IMPACT ON LOCKHART'S RATES RELATIVE TO THE INCREASE IN THIS  
2           CASE?

3       A.    Yes. Since the last case before this Commission, Lockhart's purchased  
4           power cost per kilowatt-hour has increased about 30 percent. The impact of  
5           this increase is reflected in the level of retail Power Adjustment Clause  
6           revenues in 2012, about \$2.2 million. In comparison, all of the cost increases  
7           associated with this case, net of the additional off-system revenues credited  
8           to retail customers through the Power Adjustment Clause, total about \$1.2  
9           million.

10       Q.   DOES THIS CONCLUDE YOUR PREPARED TESTIMONY?

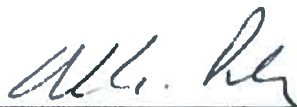
11       A.   Yes.

STATE OF GEORGIA )

VERIFICATION

COUNTY OF COBB )

PERSONALLY appeared before me Charles R. Parmelee, who, being duly sworn, states: That he is Principal, Parmelee & Associates and that the testimony attached hereto as testimony of Charles R. Parmelee, is based upon information that he believes to be true and correct.



Charles R. Parmelee

Sworn to before me this

7th day of March, 2014

The foregoing instrument was acknowledged by CHARLES R. PARMELEE, who has placed his/her signature on this instrument before me personally, and who is known to me or has produced

as identification and who did take an oath, this

7<sup>th</sup> day of MARCH, 2014.  
Signature Victoria Dollar Expires 02/27/2016

VICTORIA DOLLAR  
Notary Public  
Fulton County  
State of Georgia  
My Commission Expires Feb 27, 2016